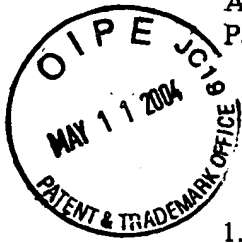


Serial No. 09/844,968
Atty Docket No.: USB-001.02
Page 4 of 12



AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A system to present data about at least one artificial structure in or over at least one hydrological feature, the system comprising:
 - at least one database for storing data about the at least one artificial structure, wherein the stored data includes structural data and is associated with one or more of the at least one artificial structure, where the at least one artificial structure is associated with at least one threshold;
 - at least one data source for providing the stored data;
 - a user interface for presenting at least one warning signal associated with the at least one artificial structure based on a comparison of: (i) the stored data, and (ii) the at least one threshold associated with the at least one artificial structure and the stored data.
2. (Previously presented) The system of claim 1, wherein the at least one data source provides at least one of: hydrological data, meteorological data, geological data and device data.
3. (Previously presented) The system of claim 2, wherein the user interface presents at least one of: hydrological data, meteorological data, structural data, environmental data, geographical data and device data.
4. (Previously presented) The system of claim 1, wherein the user interface receives and displays real-time data from the at least one data source.
5. (Previously presented) The system of claim 1, wherein the at least one data source provides environmental data selected from the group consisting of soil, vegetarian, river, hydrological, coastal, tidal and seismic data.



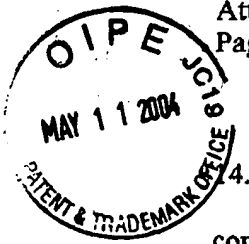
Serial No. 09/844,968
Atty Docket No.: USB-001.02
Page 5 of 12

6. (Previously presented) The system of claim 1, wherein the at least one data source provides meteorological data selected from the group consisting of radar, tide, snow and warning data.
7. (Previously presented) The system of claim 1, wherein the at least one data source provides structural data selected from the group consisting of structural detail, attributes, plans, inspection reports, maintenance memos and bridge history data.
8. (Previously presented) The system of claim 1, wherein the user interface presents data from at least a first data source and a second data source.
9. (Previously presented) The system of claim 7, wherein the user interface presents data by displaying a graphical representation of data from the first data source onto data from the second data source.
10. (Previously presented) The system of claim 8, wherein the first data source is associated with a map showing a meteorological condition, and the second data source is associated with a map showing the location of the structure.
11. (Previously presented) The system of claim 1 further comprising computer instructions for prioritizing the stored data and presenting the at least one warning signal to a user.
12. (Previously presented) The system of claim 11, wherein the at least one warning signal includes at least one of: a telephone call, an e-mail, a page, a fax, and an instant message.
13. (Currently amended) The system of claim 1, further comprising computer instructions to send the at least one warning signal to at least one of [[the]]a user and a central site.

Serial No. 09/844,968

Atty Docket No.: USB-001.02

Page 6 of 12



4. (Previously presented) The system of claim 1 wherein the user interface comprises:

a general map of an area showing the at least one artificial structure and the at least one hydrological feature,

a second map showing detail including at least one of: population density, detouring options for traveling public, emergency facilities, existing evacuation routes, and real-time location of safety personnel responding to the event, and

a comparative chart of a threshold for the area that caused the at least one warning signal to be sent and a normal or expected data for the area.

15. (Previously presented) The system of claim 14, wherein the user can select at least one of: the general map, the second map, and the detail.

16. (Previously presented) The system of claim 1, further comprising computer instructions for calculating risk probability, where the risk probability is used to prioritize the deployment of emergency personnel in response to the at least one warning signal.

17. (Currently amended) The system of claim 16, wherein the computer instructions for calculating risk probability use[[s]] a weighted risk function to create a ranking of risk probability.

18. (Previously presented) The system of claim 1, wherein a user profile determines the data to be presented to the user.

19. (Currently amended) The system of claim 1, wherein the stored data includes at least one of: hydrological data, meteorological data, structural data, environmental data, geographical data [[or]] and device data.

Serial No. 09/844,968
Atty Docket No.: USB-001.02
Page 7 of 12

20. (Currently amended) A system for monitoring at least one artificial structure in or over at least one hydrological feature, the system comprising:

a computer in communication with:

at least one data source which provides measurement data representative of at least one measurement of an environmental condition affecting the at least one artificial structure; and

at least one database which stores at least one threshold for the measurement data;

wherein the computer compares the measurement data with the at least one threshold and communicates at least one alert when the measurement data exceeds the at least one threshold.

21. (Currently amended) The system of claim 20, wherein the at least one data source provides at least one of: meteorological data, hydrological data, geological data, and device data.

22. (Previously presented) The system of claim 20, wherein the measurement data is at least one of: radar data, tide data, snow data, warning data, water flow data, water stage data, ice data, soil data, vegetation data, seismic data, and scour data.

23. (Previously presented) The system of claim 20, wherein the at least one alert is at least one of: a page, a telephone call, a fax, and an email.

24. (Previously presented) The system of claim 20, where the at least one alert identifies the at least one threshold exceeded by the measurement data, the measurement data exceeding the at least one threshold, and the location of the at least one artificial structure corresponding to the at least one threshold exceeded by the measurement data.

25. (Previously presented) A method for monitoring at least one artificial structure in or over at least one hydrological feature, the method comprising:

Serial No. 09/844,968
Atty Docket No.: USB-001.02
Page 8 of 12



receiving, over a communications network, measurement data representing at least one measurement of an environmental condition affecting the at least one artificial structure;
comparing the received measurement data to at least one threshold; and
communicating an alert when the received measurement data exceeds the at least one threshold.

26. (Previously presented) The method of claim 25, wherein the received measurement data is at least one of: meteorological data, hydrological data, geological data, and device data.

27. (Previously presented) The method of claim 25, wherein the received measurement data is at least one of: radar data, tide data, snow data, warning data, water flow data, water stage data, ice data, soil data, vegetation data, seismic data, and scour data.

28. (Previously presented) The method of claim 25, wherein the alert is at least one of: a page, a telephone call, a fax, and an email.

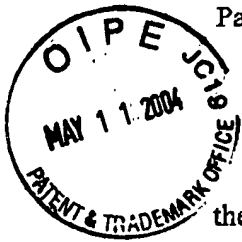
29. (Previously presented) The method of claim 25, where the at least one alert identifies at least one of: the at least one threshold exceeded by the received measurement data, the received measurement data exceeding the at least one threshold, and the location of the at least one artificial structure corresponding to the at least one threshold exceeded by the received measurement data.

30. (Currently amended) A system for prioritizing at least one artificial structure in or over hydrological features, the system comprising:

a computer in communication with;

data sources which provide measurement data representing at least one measurement of an environmental condition associated with the at least one-artificial structures;

Serial No. 09/844,968
Atty Docket No.: USB-001.02
Page 9 of 12



at least one database which associates the measurement data with one or more of the at least one artificial structure, where the at least one artificial structure is associated with at least one threshold, where the at least one threshold is associated with a priority;

wherein the computer;

compares the measurement data the associated at least one threshold to identify the measurement data exceeding the associated at least one threshold;

identifies at least one artificial structure associated with the identified measurement data; and

prioritizes the identified at least one artificial structure based on the priority associated with the at least one threshold exceeded by the identified measurement data.

31. (Previously presented) The system of claim 30, wherein the data sources provide at least one of: meteorological data, hydrological data, geological data, and device data.

32. (Previously presented) The system of claim 30, wherein the data is at least one of: radar data, tide data, snow data, warning data, water flow data, water stage data, ice data, soil data, vegetation data, seismic data, and scour data.

33. (Previously presented) The system of claim 30, wherein the computer further provides at least one alert that identifies at least one of: the exceeded threshold, the measurement that exceeds the threshold, the priority of the exceeded threshold and the location of the structure corresponding to the exceeded threshold.

34. (Previously presented) The system of claim 33, wherein the at least one alert is a page, a telephone call, a fax, and an email.



Serial No. 09/844,968
Atty Docket No.: USB-001.02
Page 10 of 12

35. (Previously presented) A method for prioritizing at least one artificial structure in or over at least one hydrological feature, the method comprising:

receiving, over a communications network, measurement data representing at least one measurement of an environmental condition associated with the at least one artificial structure;

storing the measurement data in at least one database to associate the measurement data with one or more of the at least one artificial structure, where the at least one artificial structure is associated with at least one threshold, where the at least one threshold is associated with a priority;

comparing the measurement data the associated at least one threshold to identify measurement data exceeding the associated at least one threshold;

identifying those of the at least one artificial structure associated with the identified measurement data; and

prioritizing the identified artificial structures based on the priority associated with the at least one threshold exceeded by the identified measurement data.

36. (Previously presented) The method of claim 35, wherein the received measurement data is at least one of: meteorological data, hydrological data, geological data, and device data.

37. (Previously presented) The method of claim 35, wherein the received measurement data is at least one of: radar data, tide data, snow data, warning data, water flow data, water stage data, ice data, soil data, vegetation data, seismic data, and scour data.

38. (Previously presented) The method of claim 35, further comprising:

providing at least one alert that identifies at least one of: the at least one threshold exceeded by the measurement data, the identified measurement data, the priority of the at least

Serial No. 09/844,968
Atty Docket No.: USB-001.02
Page 11 of 12



one threshold exceeded by the measurement data, and the location of the at least one artificial structure associated with the at least one threshold exceeded by the measurement data.

39. (Previously presented) The method of claim 38, where the at least one alert is at least one of: a page, a telephone call, a fax, and an email.